





Compass Minerals
Utah Division Of Oil, Gas and Mining
Earth Day Award Candidate Project
West Pond Sustainability Project
March 2016

Agenda



- Introduction to Compass Minerals
- East Pond Sustainability Project implemented in 2012
- West Pond Sustainability Project
- West Pond Mineral Return (to GSL) Project



About Compass Minerals

- Headquartered in Kansas City metropolitan area
- Stock trades on the New York Stock Exchange under the symbol CMP (NYSE: CMP)
- History stretches back to 1844
- Two major business divisions: salt and plant nutrition
- Production locations in three countries
 - Canada
 - U.K.
 - U.S.
- Almost 2,000 employees worldwide















Overview of Ogden, Utah, Operations



- The Ogden SOP plant has operated since 1970
- Compass Minerals acquired the operation in 1993
- More than 375 employees work at the Ogden Site;
 supplement with seasonal and/or temporary employees
- Production at Ogden:
 - Sulfate of potash, a specialty fertilizer
 - Leading SOP specialty fertilizer producer in the Western Hemisphere
 - Have the capacity to produce 320,000 tons annually
 - Salt, used for highway deicing and commercial products
 - Have the capacity to produce 1.5 million tons annually
 - Magnesium chloride, used for roadway deicing in winter and dust control in the summer
 - Capacity to produce 750,000 tons annually
- Vendors, suppliers and contractors contribute approximately
 \$200 million annually to the economy of Ogden, Weber County and Utah







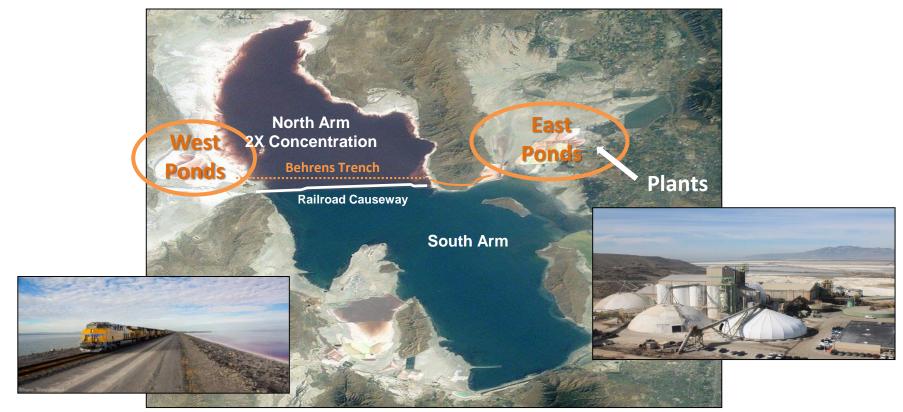






Pond Operations on the Great Salt Lake







East Pond Sustainability Project - 2012

Compass Minerals

- Compass Minerals invested >\$40MM to improve the functionality of its eastern solar evaporation ponds
- Sealed outer perimeter dikes with cement bentonite grout
- Sealing preserves concentrated brine by reducing leakage
- DOGM issued a LMO amendment to enable construction of sealing
- Process triggered concerns and questions from GSL stakeholder groups, including FRIENDs of Great Salt Lake
 - Stakeholders pleased the investment would reduce brine consumption
 - Raised other concerns regarding future mine closure process
 - Compass Minerals collaborated with FOGSL, Western Resource Advocates, Utah AG and DOGM to develop a sustainable plan that improved reclamation strategies to eliminate / minimize future impacts once ponds were closed
 - Agreed to address all concerns
 - Focus mine closure discharges out of Bear River Bay
 - Limit timing of discharges to avoid seasonal bird-use
 - Use rip-rap to construct over 20 bird sanctuary islands
 - Focused dike breaches







East Pond Sealing Program - Map







Future Shorebird Island Locations - Compass Minerals **East Ponds**







Compass Minerals' West Pond Sustainability Project

- Worked with US Army Corps of Engineers to change Ordinary High Water Mark of GSL to be in accordance with current law
 - OHWM revised from 4,205' amsl to 4,199' amsl in North Arm of GSL
 - Decision enabled Compass Minerals to implement West Pond Sustainability (WPS) Project
- WPS consists of:
 - Construct >6,000 acres of ponds upland of GSL: Pond 115
 - Seal main perimeter dike with cement bentonite to reduce leakage
 - Will continue operation of existing west ponds
 - Materially reduce leakage
 - Results in a ~20% reduction in annual brine consumption
 - Integrate sustainable use of interstitial brines within accumulated salts
 - Supplement lake brine consumption with brine already pumped from the lake over 25 years
- DOGM issued an amendment to LMO Permit in November 2015
- Construction of pond began in November 2015
- Project supported by key environmental stakeholder groups, including FOGSL



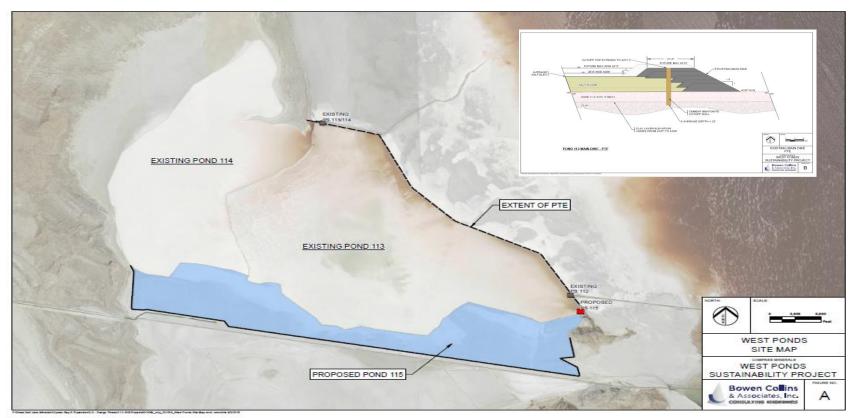






Pond 115 Location Map







Elements of West Pond Reclamation Plan



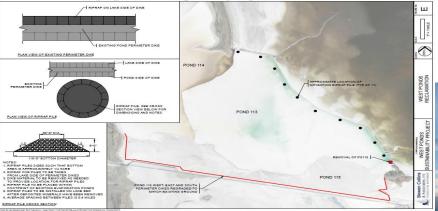
- Integrated rip-rap cluster concept to create additional shorebird habitat on main, east dike
 - Added \$1.2MM to surety bond
- Pond 115 will be constructed to facilitate eventual deployment of mineral return operations
- Continue to evaluate best means and resources to implement Mineral Return Operations
 - To be operationally sustainable, we need to identify a means of returning unmarketable salts back to the lake
 - Need to maintain steady available free-board capacity in west pond complex
 - Challenged in west desert due to lack of fresh water
- Conservation community desires to have salinity restored so as not to deplete the GSL of salinity over long term; need to return accumulated salts back to GSL from 25k acre pond complex





Future Shorebird Island Locations - Compass
Minerals **West Ponds**







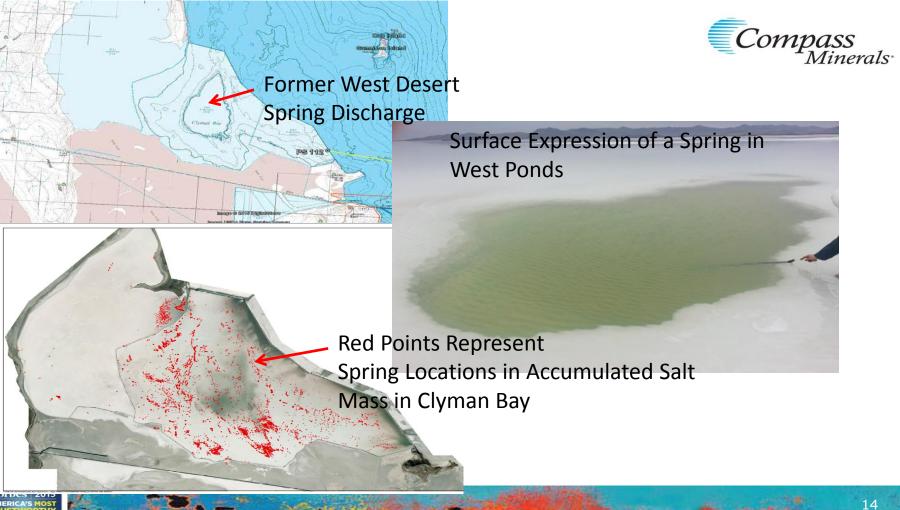


West Pond Mineral Return Concept



- Compass Minerals currently in midst of evaluating alternatives / design
- Mineral return needed to support and facilitate west-pond sustainability
 - Use water to dissolve accumulated salts in ponds to maintain freeboard
 - Action benefits GSL by preserving salinity
- Evaluating potential to reconnect (to the GSL) groundwater resources that flowed to lake prior to early 1990s
 - Discovered a shallow aquifer that previously (prior to construction of west pond complex in early 1990s) discharged groundwater to North Arm of GSL via a spring beneath existing west pond complex
 - Evaluating feasibility of using this shallow groundwater that is currently prevented from flowing to the GSL to execute mineral return, and adding incremental water flow to the GSL
- Mineral Return process would be non-consumptive use of water...water flow restored to GSL





Protecting Water Flows to GSL



- Working with various groups to protect inflows to GSL
- Compass Minerals has a water right for up to 8,000 CFS into Bear River Bay
 - Beneficial use is identified as Conservation / Wildlife Habitat
- Originally intended to be mitigation for Bear River Bay development
- Compass Minerals is developing a plan with partners to transfer to Bear River Refuge and stake claim to available 'wet water' flowing to Bay / GSL
- Use of other mitigation
 - Compass Minerals is evaluating ways to utilize mitigation that had been accumulated under original pond development plan
 - Benefits to Locomotive Springs











